

Fig. 1

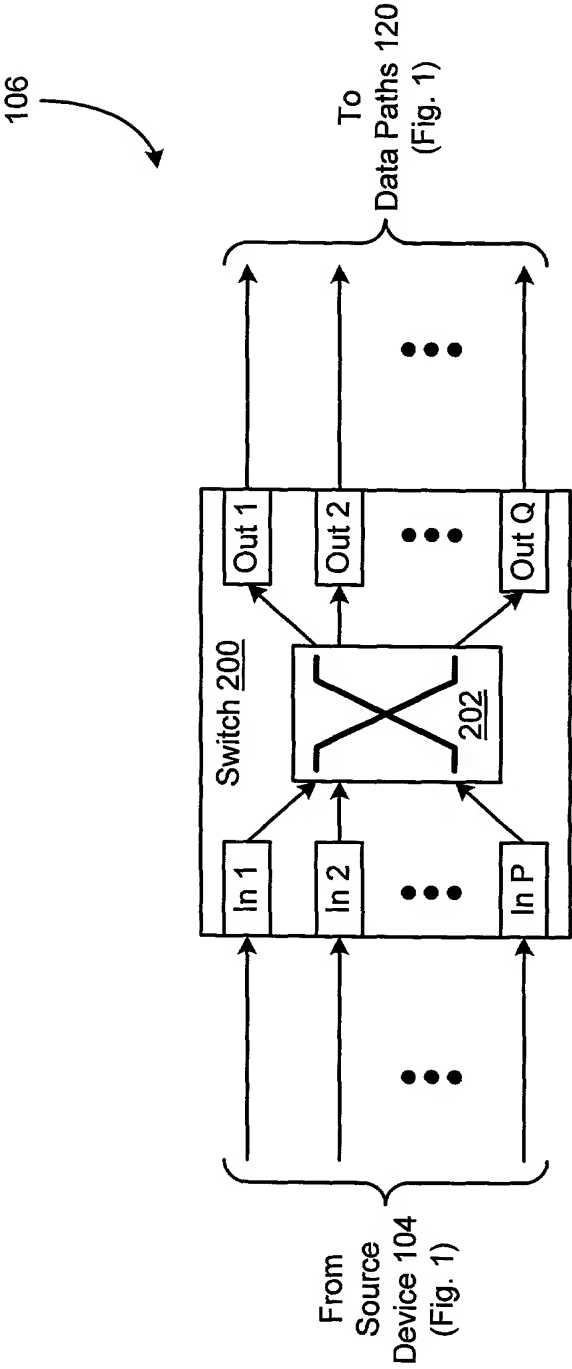


Fig. 2

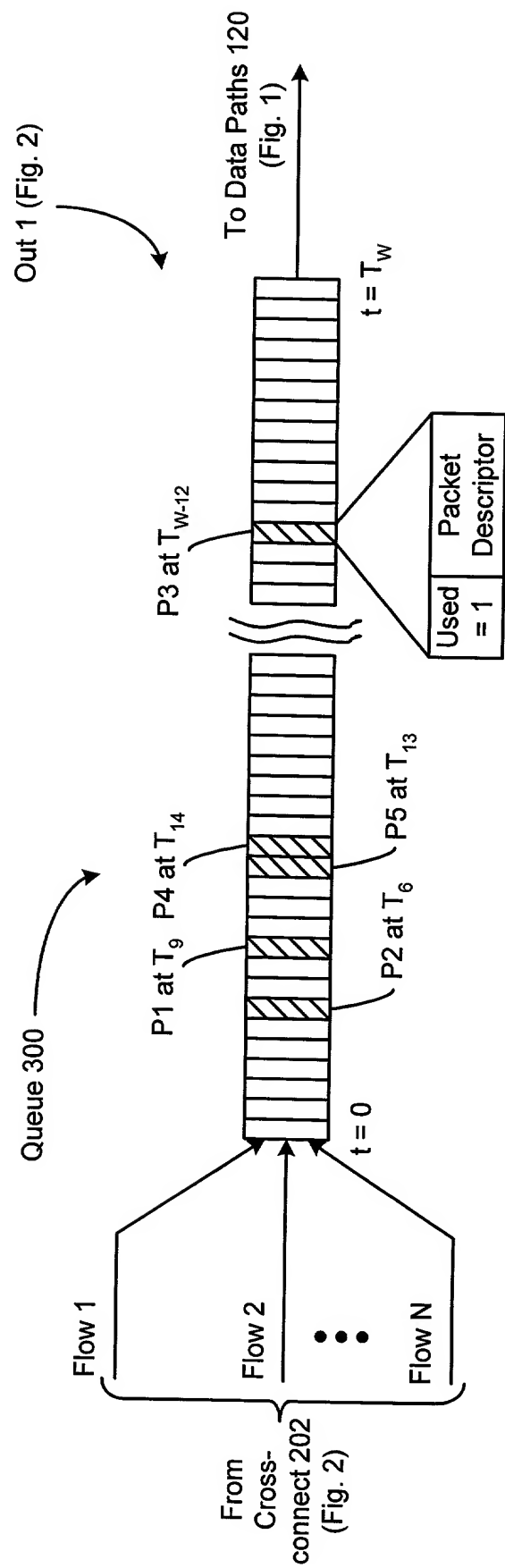


Fig. 3

204270" 6099500T

204210 60995001

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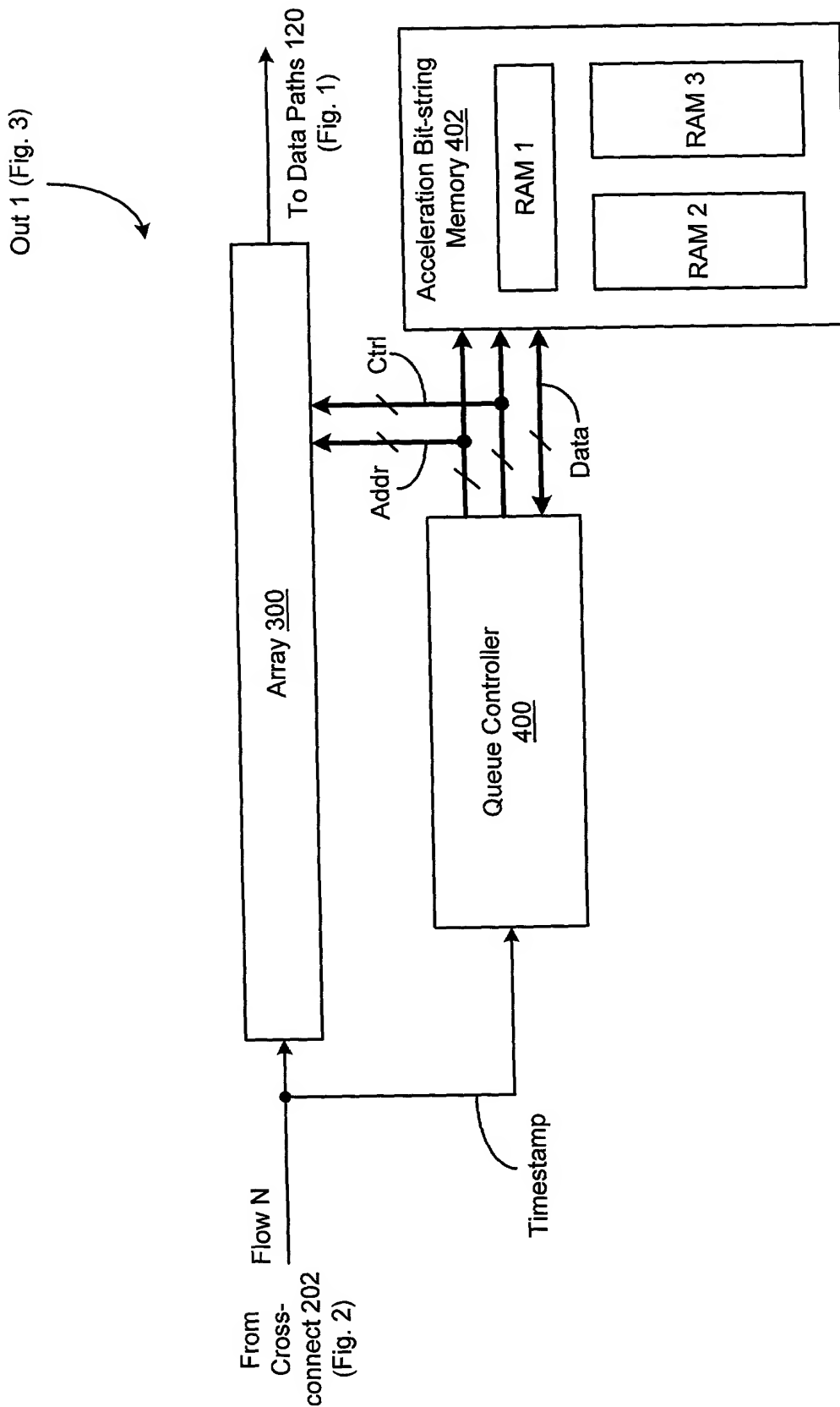


Fig. 4

204210" 60995001

Title: OPERATION OF A MULTIPLICITY
OF TIME SORTED QUEUES ...
Inventor Name: Ronald L. Pettyjohn,
et al.
Appl. No. Unassigned
Docket No.: CRESC-006XX

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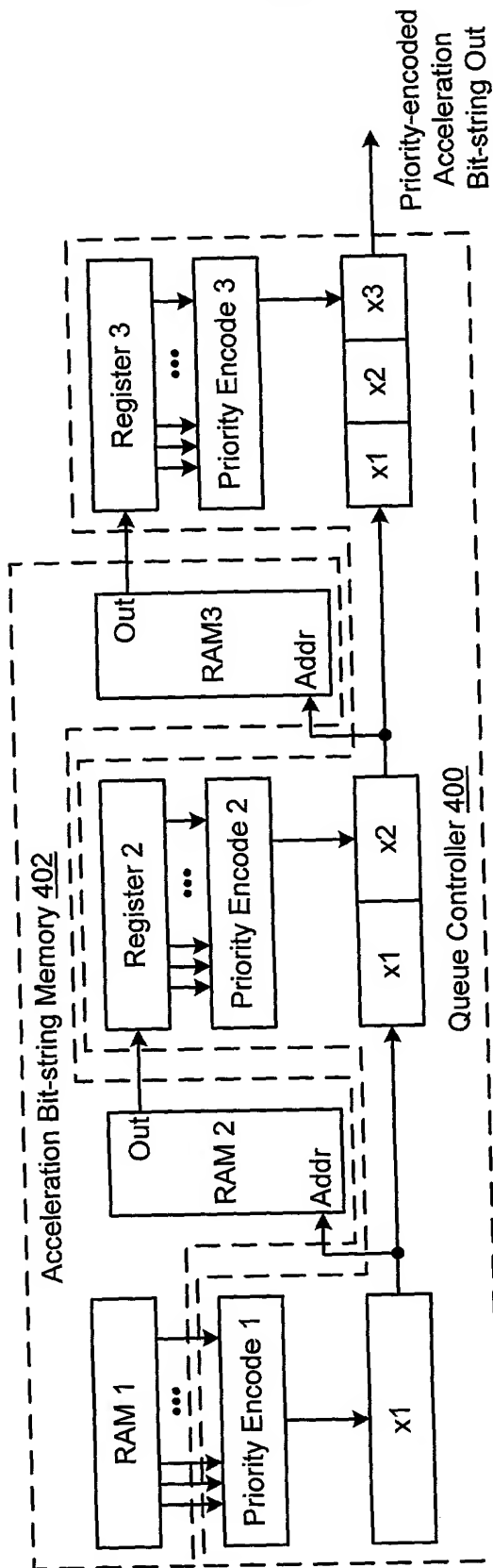


Fig. 5

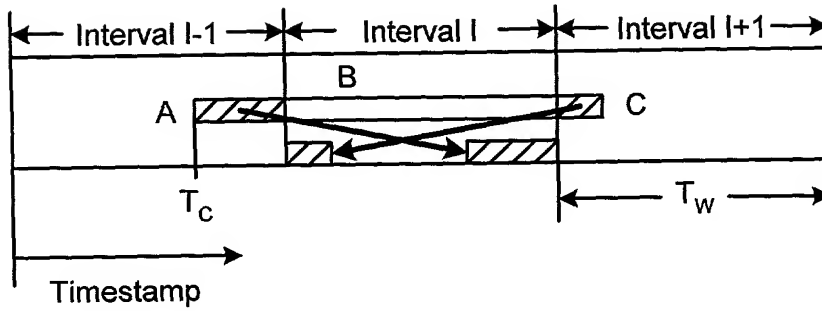


Fig. 6a

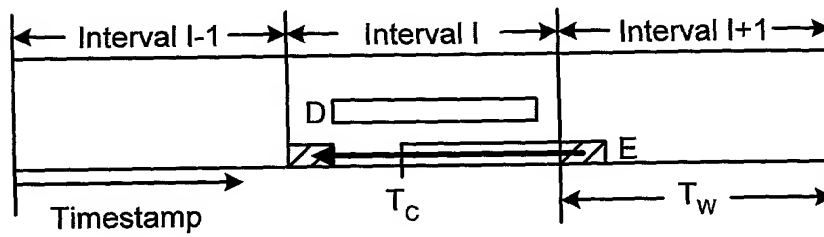


Fig. 6b

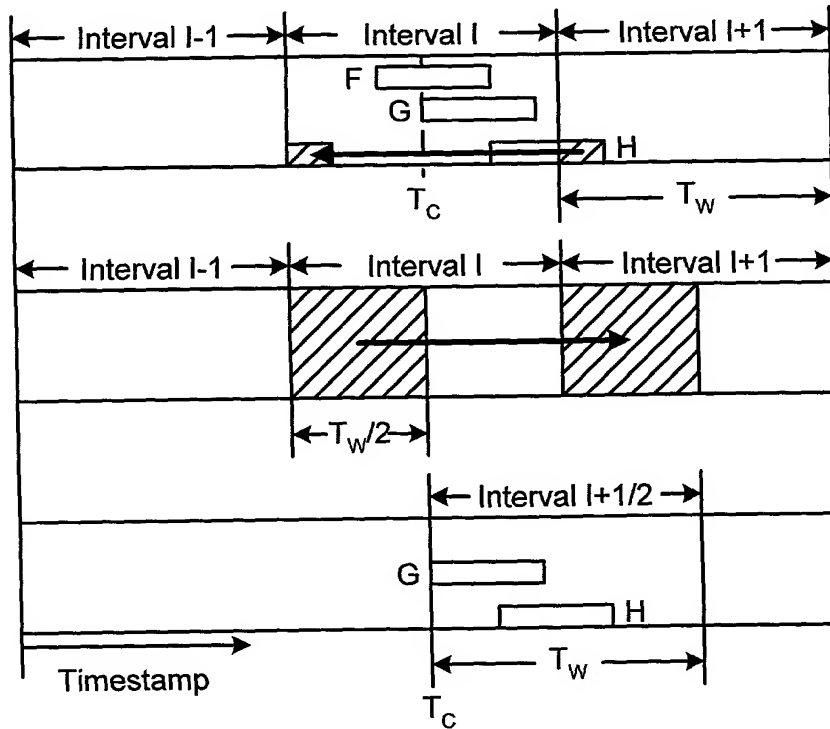


Fig. 6c

20121010 012402 10056609

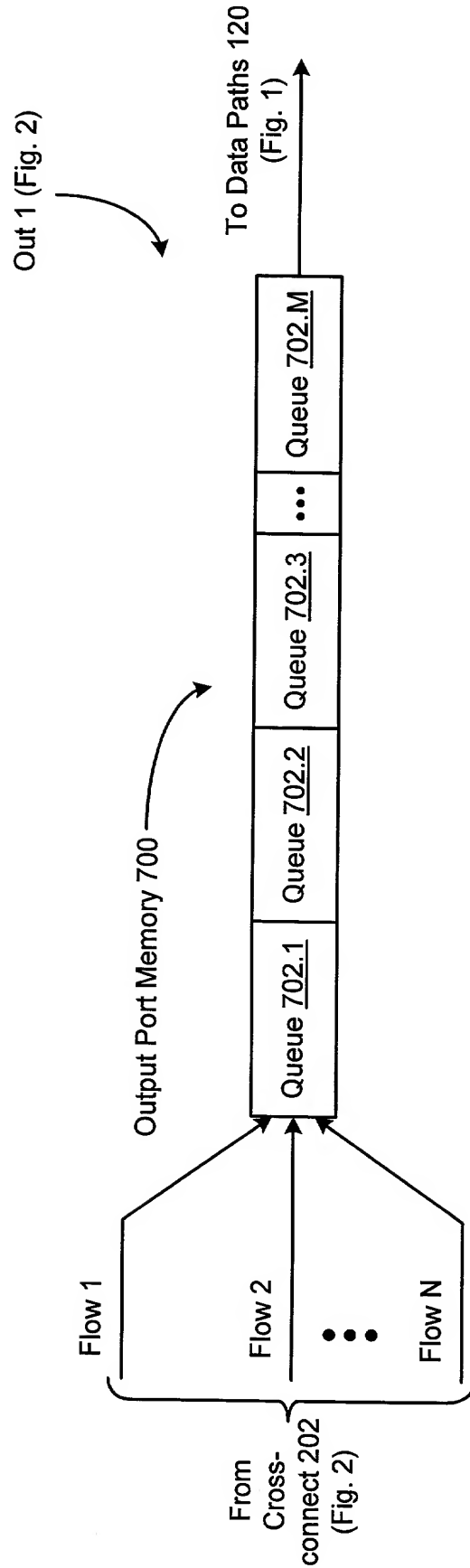


Fig. 7

//RAM1 = First Level Acceleration Bit-string Memory
 //RAM2 = Second Level Acceleration Bit-string Memory
 //RAM3 = Third Level Acceleration Bit-string Memory
 //ARRAY = Linear Time-Indexed Array
 //T = Timestamp Value
 //T = T1||T2||T3||TA
 // where T1 = First Timestamp Value Sub-field
 // T2 = Second Timestamp Value Sub-field
 // T3 = Third Timestamp Value Sub-field
 // TA = Fourth Timestamp Value Sub-field
 // P = Packet Descriptor
 ARRAY[T] \leftarrow P //Timeslot is marked "Used" (Used=1).
 RAM1<T1> \leftarrow 1
 RAM2[T1]<T2> \leftarrow 1
 RAM3[T1||T2]<T3> \leftarrow 1

Fig. 8

//x1 = First Level Priority-encoded Acceleration
 //Bit-string
 //x2 = Second Level Priority-encoded Acceleration
 //Bit-string
 //x3 = Third Level Priority-encoded Acceleration
 //Bit-string
 x1 \leftarrow PRI(RAM1)
 x2 \leftarrow PRI(RAM2[x1])
 x3 \leftarrow PRI(RAM3[x1||x2])
 X \leftarrow x1||x2||x3
 //Read N entries of ARRAY starting with ARRAY[X].
 P \leftarrow ARRAY[K] //K = the index of the first "Used"
 //ARRAY entry read. Timeslot is
 //marked "Unused" (Used=0).
 RAM3[x1||x2]<x3> \leftarrow 0 //In the event all ARRAY[X]
 //through ARRAY[X+N-1] are
 //now Unused.
 RAM2[x1]<x2> \leftarrow 0 //In the event RAM3[x1||x2] = 0.
 RAM1<x1> \leftarrow 0 //In the event RAM2[x1] = 0.

Fig. 9